



Air Quality
TIER II OPERATING PERMIT
State of Idaho
Department of Environmental Quality

PERMIT NO.: T2-040323
FACILITY ID NO.: 029-00027
AQCR: 61 **CLASS:** B
SIC: 1475 **ZONE:** 12
UTM COORDINATE (km): 471.5, 4733.7

1. PERMITTEE
Nu-West Industries, Inc., dba Agrium Conda Phosphate Operations

2. PROJECT
Dry Valley Mine

3. MAILING ADDRESS 3010 Conda Road	CITY Soda Springs	STATE ID	ZIP 83276
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4. FACILITY CONTACT Rob Squires	TITLE Environmental/Safety Coordinator	TELEPHONE (208) 547-3935 Ext. 19
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5. RESPONSIBLE OFFICIAL Daniel S. Kline	TITLE Mine Manager	TELEPHONE (208) 547-3935 Ext. 17
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6. EXACT PLANT LOCATION 25 miles north of Soda Springs on the Dry Valley Mine Road	COUNTY Caribou
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7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS
Phosphate Ore Mining

8. PERMIT AUTHORITY

This permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400, and pertains only to emissions of air contaminants, which are regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (DEQ) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be a modification. Modifications are subject to DEQ review in accordance with Section 58.01.01.200 of the *Rules for the Control of Air Pollution in Idaho*.

TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED:

Draft Public Comment

DATE EXPIRES:

+ five years

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1. TIER II OPERATING PERMIT SCOPE	4
2. FACILITY-WIDE CONDITIONS	5
3. BURNHAM BOILER	8
4. ROTARY IMPACT CRUSHER AND MATERIAL HANDLING	9
5. TIER II PERMIT GENERAL PROVISIONS	10

Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
IDAPA	A number designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
MMBtu/hr	million British thermal units per hour
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter of a nominal 10 micrometers or less
ppm	parts per million
PTC	Permit to Construct
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO ₂	sulfur dioxide
UTM	Universal Transverse Mercator
VOC	volatile organic compound

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1. TIER II OPERATING PERMIT SCOPE

Purpose

- 1.1 The purpose of this Tier II permit is to satisfy the requirements of IDAPA 58.01.01 Section 400, *Rules for the Control of Air Pollution in Idaho (Rules)* for Tier II operating permits.

Regulated Sources

- 1.2 Table 1.1 below lists all sources of emissions regulated in this Tier II operating permit.

Table 1.1 EMISSION SOURCES

Permit Section	Source Description	Emissions Control(s)
2	Mobile equipment engaged in mining and hauling ore, mine roads, and excavation areas, including operations at Pits B, C and D.	Reasonable control of fugitive dust
3	Burnham boiler, model 4FW-277-50-GO-PF, 1.86 MMBtu/hr, fired with distillate oil, used oil, and liquid petroleum gas	Good combustion control
4	Rotary impact crusher and material handling of the ore	Reasonable control of fugitive dust

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2. FACILITY-WIDE CONDITIONS

Fugitive Emissions - Fugitive Dust Control Plan

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne as required in IDAPA 58.01.01.651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. To establish reasonable precautions, the permittee shall develop, maintain and implement a Fugitive Dust Control Plan which identifies potential sources of fugitive dust and which establishes good operating practices for limiting the formation and dispersion of dust from those sources. The approved Fugitive Dust Control Plan is part of the terms and conditions of the permit.
- The Fugitive Dust Control Plan (Plan) for the Dry Valley Mine shall, at a minimum, include information and establish requirements as follows:
 - A general description of the potential sources of fugitive dust from the facility.
 - Application of water from water trucks for control of dust in mining areas, haul roads and loadout areas. The Plan must establish specific, quantifiable, minimum frequencies for which the water must be applied. Water does not need to be applied when the surface is wet (i.e. during/following rainy conditions) or when reduced ambient temperatures may cause the water to freeze.
 - Application of suitable dust suppressant chemicals (e.g., magnesium chloride) to haul roads during the dry season. The Plan must specify a specific, quantifiable, minimum frequency for which the chemicals must be applied.
 - Drill rigs shall be equipped with water spray systems to reduce dust during drilling operations. The water sprays shall be used whenever drilling operations are being conducted. The water sprays do not need to be used when the ground is wet (i.e. during/following rainy conditions) or when reduced ambient temperatures may freeze the water in the system.
 - Establish procedures to minimize material drop heights and dust formation during truck loading operations and when dumping material from front-end loaders.
 - Establish procedures to minimize dust formation during conveying operations including the specific, quantifiable, maximum material drop height(s).
 - Training/orientation of employees about the Fugitive Dust Control Plan procedures.
 - The initial Fugitive Dust Control Plan shall be submitted to DEQ for review and approval no later than 60 days after the issuance date of this permit. After approval of the initial plan, the permittee may update the plan at any time by submitting the proposed changes to DEQ for review and approval. The updated plan shall not become effective until approved by DEQ. If DEQ deems that the change in the plan qualifies as a permit to construct modification as defined in IDAPA 58.01.01.006, the procedures specified in IDAPA 58.01.01.200-228 shall be followed to make the change.
 - When in operation, the permittee shall comply with the provisions in the approved Fugitive Dust Control Plan at all times. Whenever an operating parameter is outside the operating range specified by the plan, the permittee shall take corrective action as expeditiously as practicable to bring the operating parameter back within the operating range.

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- A copy of the Fugitive Dust Control Plan shall remain onsite at all times.

- 2.2 The permittee shall conduct monthly facility-wide inspection of potential sources of fugitive dust emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive dust emissions are effective. If fugitive dust emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each monthly fugitive dust emission inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive dust emissions were present (if observed), any corrective action taken in response to the fugitive dust emissions, and the date the corrective action was taken. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.
- 2.3 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive dust emissions. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

Visible Emissions

- 2.4 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this section.
- 2.5 Fugitive emissions shall not be observed leaving the property boundary for a period or periods aggregating more than three minutes in any 60-minute period. Visible emissions shall be determined by Method 22, as described in 40 CFR 60, Appendix A, or a DEQ-approved alternative method. For purposes of this condition, the property boundary is considered the boundary of any surface-leased property, surface-owned property, or mineral-lease boundary for the Dry Valley Mine.

[IDAPA 58.01.01.405.01, 5/1/94]

Reports and Certifications

- 2.6 Any reporting required by this permit, including, but not limited to records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, #300
Pocatello, ID 83201

[IDAPA 58.01.01.405.01, 5/1/94]

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Open Burning

- 2.7 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, *Rules for Control of Open Burning*.

[IDAPA 58.01.01.600-616, 5/1/94]

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3. BURNHAM BOILER

3.1 Process Description

The Burnham boiler is a 1.85 MMBtu/hr boiler which fires distillate oil, used oil and/or liquefied petroleum gas for space heating.

3.2 Control Description

Emissions from the Burnham boiler are uncontrolled.

Emissions Limits

3.3 Emissions Limits

Particulate matter emissions from the boiler shall not exceed 0.05 grains per dry standard cubic foot (gr/dscf) corrected to 3% oxygen during the combustion of used oil.

[IDAPA 58.01.01.677, 5/1/94]

Operating Requirements

3.4 Used Oil Specifications

3.4.1 Any used oil combusted in the boiler shall be non-hazardous used oil only.

3.4.2 Used oil combusted in the boiler shall not contain more than 2.8 parts per million (ppm) by weight of arsenic.

3.4.3 The boiler is limited to firing 22,000 gallons of used oil per consecutive 12-month period.

[IDAPA 58.01.01.405.01, 5/1/94]

Monitoring and Recordkeeping Requirements

3.5 Used Oil Burned

The permittee shall monitor and record the amount of used oil burned in the Burnham boiler. Each month the permittee shall record the total gallons burned for the previous month and for the previous consecutive 12-month period. Records shall be kept onsite for a two-year period and shall be made available to DEQ representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

3.6 Used Oil Analysis

The permittee shall analyze a grab sample of the used oil in the holding tank prior to the beginning of the heating season to demonstrate compliance with Permit Condition 3.4.2. The results of the used-oil analysis shall be accompanied by a record of the estimated amount of used oil in the holding tank, which the sample represents. A compilation of the most recent two years of records shall be kept onsite, and shall be made available to DEQ representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

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4. ROTARY IMPACT CRUSHER AND MATERIAL HANDLING

4.1 Process Description

The primary purpose of the emissions unit is to process and crush phosphate ore for loadout to railcars.

4.2 Control Description

Emissions from the rotary impact crusher and material handling are controlled using reasonable control measures for fugitive dust.

Emissions Limits

4.3 Crusher Opacity Limit

Particulate matter emissions from portable rock crushers shall not exhibit more than 15% opacity in accordance with 40 CFR 60.672(c). Opacity shall be determined using the procedures specified in 40 CFR 60.675.

[40 CFR 60.672(c)]

4.4 Transfer Point Opacity Limit

Particulate matter emissions from any transfer point on belt conveyors, or from each grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck, or rail car loading station shall not exhibit greater than 10% opacity in accordance with 40 CFR 60.672(b). Opacity shall be determined using the procedures specified in 40 CFR 60.675.

[40 CFR 60.672(b)]

Operating Requirements

4.5 Phosphate Ore Throughput

Annual phosphate ore throughput from the haul-truck loadout at the storage pile to the railcar loading shall be limited to 3,000,000 tons per consecutive 12-month period on a dry tonnage basis.

[IDAPA 58.01.01.405.01, 5/1/94]

Monitoring and Recordkeeping Requirements

4.6 Phosphate Ore Throughput

On a monthly basis, the permittee shall monitor and record the total throughput of phosphate ore from the haul truck loadout at the storage pile to the railcar loading point for the previous month and for the previous consecutive 12-month period. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

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5. TIER II PERMIT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code 39 101 et seq.
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
3. The permittee shall allow the director, and/or his authorized representative(s), upon the presentation of credentials:
 - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.
6. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.